

Consultant
recommended option

Interchange Concept Options Comparison

Interchange Type	Partial Cloverleaf	Single Point	Diverging Diamond
Year 2035 Traffic Operations (PM Peak hour)			
Level of Service (LOS)	(1)	D	C
Avg. Delay (seconds)	(1)	37	25 to 30 (2)
Right-of-Way Impacts	Major	Minimal	Minimal
Approximate Construction Cost (Million \$)	(1)	11	5
Ease of Construction	Simple	Complex	Moderate
Traffic impacts during construction	Minor	Major	Moderate
Expected Driver Acceptance	Good	Good	Moderate (3)
Pedestrian Accommodations	Moderate	Moderate	Good

Notes:

- (1) Due to the significant property impacts of the partial cloverleaf interchange, level of service and construction cost were not determined for the partial cloverleaf concept option
- (2) SB ramp intersection = 25 seconds, NB ramp intersection = 30 seconds (VISSIM analysis)
- (3) Adequate driver education at other DDI installations has led to overall good driver acceptance.

Benefits/drawbacks of options as well as basis of Consultant Recommended Option are listed on the project website:

http://www.sddot.com/pe/projdev/planning_ss_I29Exit77.asp



Date of Aerial Photography: 2008

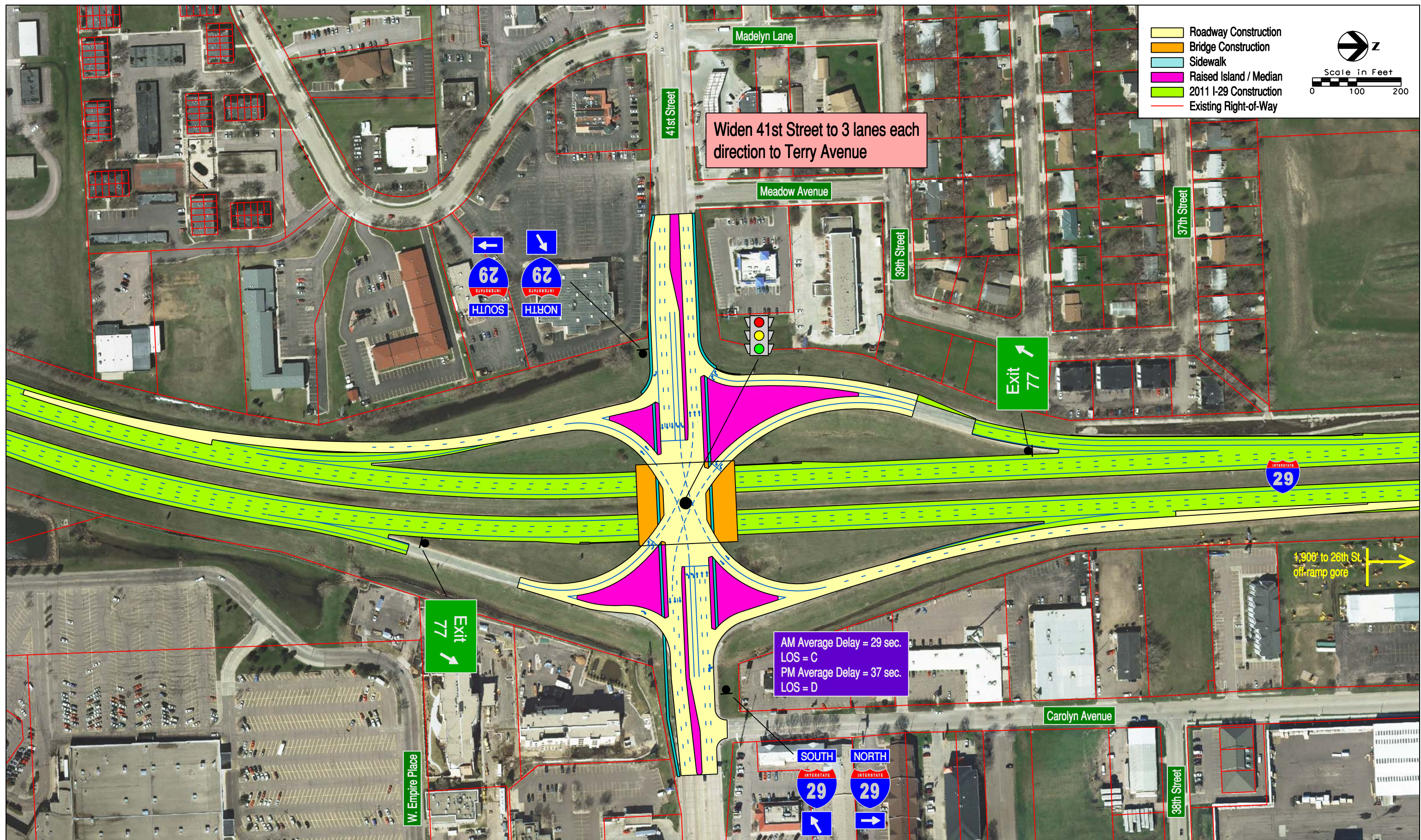
Drawn By: B. Miller
Date: 9-21-2011
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Revisions:



Partial Cloverleaf Interchange Option

I-29 Exit 77 (41st Street) Crossroad Corridor Study

Sioux Falls, SD



Date of Aerial Photography: 2008

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Single Point Interchange Option

I-29 Exit 77 (41st Street) Crossroad Corridor Study

Sioux Falls, SD

Figure
5-2

